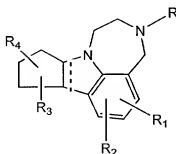


What is Claimed:

1. A process for the synthesis of compounds of formula I:



I

wherein

R is hydrogen;

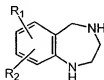
R₁, R₂ are each, independently, hydrogen, alkyl of 1-6 carbon atoms, alkoxy of 1-6 carbon atoms, halogen, fluorinated alkyl of from 1 to 6 carbon atoms, -CN, -NH-SO₂-alkyl of 1-6 carbon atoms, -SO₂-NH-alkyl of 1-6 carbon atoms, alkyl amide of 1-6 carbon atoms, amino, alkylamino of 1-6 carbon atoms, dialkylamino of 1-6 carbon atoms per alkyl moiety, fluorinated alkoxy of 1-6 carbon atoms, acyl of 2-7 carbon atoms, or aroyl, preferably phenoyl or thiophenoyl;

R₃, R₄ are each independently hydrogen, C₁-C₆ alkyl, cycloalkyl of from 3 to 7 carbon atoms or -CH₂-cycloalkyl of from 3 to 7 carbon atoms;

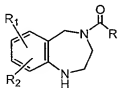
wherein the dashed line indicates an optional double bond;

the process comprising the steps of:

- a) acylating a benzodiazepine compound of the formula:

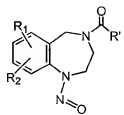


to give an acylated benzodiazepine of the formula:

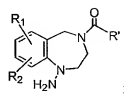


wherein R' represents alkyl of from 1 to 10 carbon atoms, preferably 1 to 6 carbon atoms, or a benzyl or naphthyl group;

- b) reacting the acylated benzodiazepine of step a) with a nitrosating agent
5 to provide an acylated nitroso benzodiazepine compound of the formula:



- c) reducing the acylated nitroso benzodiazepine compound of step b) to
yield an acylated 1-aminobenzodiazepine compound of the formula

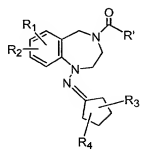


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- d) allowing the acylated 1-aminobenzodiazepine compound of step c) to
react with a cyclopentanone compound of the formula:

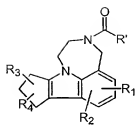


to provide a cyclopentylideneamino benzodiazepine compound of the formula:



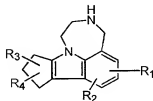
15

- e) reacting the cyclopentylideneamino benzodiazepine compound of step d)
to provide an acylated compound of the formula:



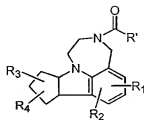
; and either

f) deacylating the acylated compound of step e) to provide a compound of the formula:



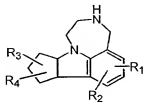
5 which may optionally be reduced; or

g) reducing the acylated compound of step e) to provide a compound of the formula:



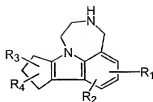
10 and

h) deacylating the compound of step g) to provide a compound of the formula:



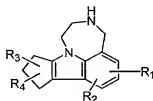
15

2) A process of Claim 1 for the production of a compound of the formula:

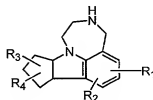


comprising the steps a) through f) of Claim 1, wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1.

- 5 3) The process of Claim 2 with an additional step of reducing the compound of the formula:

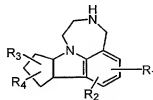


to produce a compound of the formula:

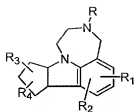


- 10 wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1.

4) A process of Claim 3 further comprising the step of alkylating the compound of the formula:

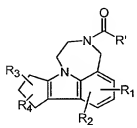


- 15 wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1, to provide an alkylated compound of the formula:

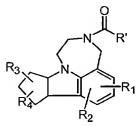


wherein R is an alkyl group of from 1 to 6 carbon atoms.

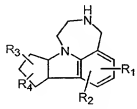
- 5) A process according to Claim 1 comprising steps a) through e) of Claim 1
5 to provide an acylated compound of the formula:



followed by reduction of the acylated compound to provide a reduced acylated compound of the formula:

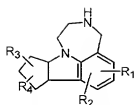


- 10 and deacylation of the reduced acylated compound to provide a compound of the formula:

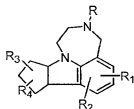


wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1.

- 15 6) A process of Claim 5 further comprising the step of alkylating the compound of the formula:

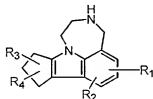


wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1, to provide an alkylated compound of the formula:



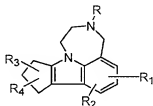
- 5 wherein R is an alkyl group of from 1 to 6 carbon atoms and R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1.

7) A process of Claim 1 comprising steps a) through f) of Claim 1 to produce a compound of the formula:



10

wherein R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1, and further comprising the step of alkylating the compound to produce an alkylated compound of the formula:



wherein R is an alkyl group of from 1 to 6 carbon atoms and R_1 , R_2 , R_3 , and R_4 are as

15 defined in Claim 1.

8) A process of Claim 1 wherein R is hydrogen and R_1 , R_2 , R_3 , and R_4 are as defined in Claim 1.

- 10) A process of Claim 1 wherein R₁, R₁¹, R₂, R₃, and R₄ are each hydrogen.

5

Variable	Mean	SD	Min	Max
Age	38.5	10.2	25	55
Gender	Male	Female		
Marital Status	Married	Single		
Education	High School	College		
Occupation	Manager	Worker		
Income	\$30,000	\$40,000		
Health Status	Good	Fair		
Exercise Frequency	Weekly	Monthly		
Stress Level	Low	High		
Sleep Quality	Good	Poor		
Dietary Habits	Healthy	Unhealthy		
Alcohol Consumption	Occasional	Frequent		
Tobacco Use	Non-user	User		
Family Size	2	3		
Home Ownership	Owner	Renter		
Commute Time	15 min	30 min		
Work Hours	40 hrs/week	50 hrs/week		
Job Satisfaction	High	Low		
Life Satisfaction	High	Low		
Overall Well-being	Good	Fair		